ABSTRACT

- Sentinel lymph node biopsy (SLNB) in patients with clinically positive nodes undergoing neoadjuvant chemotherapy (NCT) has been evaluated in recent clinical trials.
- Patients who become clinically node negative following NCT may be candidates for SLNB.
- The appropriate selection of patients for this approach remains challenging.
- Previous studies have looked at factors predicting the likelihood of complete nodal pathologic response (pCR) after NCT.
- Studies are emerging exploring the role of Oncotype DX® in predicting response to neoadjuvant therapy; however, research to date is lacking specifically regarding the role of Oncotype DX® recurrence score (RS) in predicting nodal response after NCT.
- This study aimed to assess the association between low and high RS with nodal pCR.

METHODS

- The NCDB was used to identify patients with T1-T2, clinically N1/N2, ER-positive, HER2-negative invasive ductal carcinoma from 2010-2015 who underwent neoadjuvant chemotherapy and in whom an Oncotype DX® recurrence score (RS) was performed.
- RS was classified as low (<17), intermediate (18-30), and high (>31).
- Chi square analyses were performed to determine association between clinical characteristic and nodal pCR.

RESULTS

- Of 158 patients, RS was low in 35%, intermediate in 39%, and high in 25%.
- Nodal pCR occurred in a greater proportion of patients with high RS, compared with intermediate or low RS (48% vs. 26%, and 26%, respectively, p-value =0.027)

CONCLUSIONS

- Patients with high RS have greater rates of nodal pCR following NCT.
- This study shows promise in utilizing Oncotype DX® to identify breast cancer patients with clinically positive lymph nodes in whom a significant response to NCT can be anticipated, and who would be ideal candidates for SLNB as opposed to ALND.